

	Document ID	Issue Date	Pages	Title	Current OR
1	US 20040264591 A1	20041230	14	Method and system for M-QAM detection in communication systems	375/261
2	US 20040190641 A1	20040930	33	Method and system for modulating and demodulating signals in ultra-wide band (UWB) communication systems	375/261
3	US 20040131125 A1	20040708	103	Enhanced wireless packet data communication system, method, and apparatus applicable to both wide area networks and local area networks	375/261
4	US 20040091058 A1	20040513	15	QAM receiver and method for constellations having at least sixteen symbols	375/261
5	US 20040013189 A1	20040122	25	Soft slicer in a hybrid decision feedback equalizer	375/233
6	US 20030142759 A1	20030731	22	Transmission system for reduction of amateur radio interference	375/298
7	US 20030058967 A1	20030327	32	Phase detectors in carrier recovery for offset QAM and VSB	375/327
8	US 20030058955 A1	20030327	22	High-speed communications transceiver	375/265
9	US 6952458 B1	20051004	14	Demapping system and method	375/341
10	US 6904098 B1	20050607	22	Linear phase robust carrier recovery for QAM modems	375/261
11	US 6757334 B1	20040629	72	Bit rate agile third-generation wireless CDMA, GSM, TDMA and OFDM system	375/259
12	US 6665348 B1	20031216	76	System and method for interoperable multiple-standard modulation and code selectable Feher's GMSK, enhanced GSM, CSMA, TDMA, OFDM, and third-generation CDMA, W-CDMA and B-CDMA	375/259

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1		Malm, Peter et al.
2		Ojard, Eric
3		Sanderford, H. Britton JR. et al.
4		Tosato, Filippo et al.
5	375/229; 375/235; 375/261	Jayaraman, Srikant et al.
6	375/261; 375/350	Anderson, Carl William et al.
7	375/261; 375/371; 375/376	Lin, Thuji S. et al.
8	375/261	Raghavan, Sreen
9	375/253; 375/261; 714/780; 714/796	Djokovich; Igor et al.
10	375/326; 375/327; 375/350	Isaksen; David Bruce et al.
11	375/219; 375/261; 375/296; 375/298	Feher; Kamilo
12	375/130; 375/219; 375/261; 375/298	Feher; Kamilo

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13	US 6651210 B1	20031118	17	Flexible multi-bit per symbol rate encoding	714/758
14	US 6633614 B1	20031014	32	Multicarrier personal access communication system	375/264

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13	375/261; 714/752; 714/774; 714/779; 714/784	Trott; Mitchell D. et al.
14	375/261; 375/295 CIPG 20060101 A H04L H04L5/0 2 L I R US M 20060101 CICL H04L CIPS H04L5/0 2 20060101 CIPG 20060101 A H04L H04L5/0 2 L I R US M 20060101 CICL H04L CIPS H04L5/0 2 20060101 CIPG 20060101 A H04L H04L25/ 03 L N R US M 20060101 CICL H04L CIPN H04L25/ 03; 20060101	Barton; Melbourne et al.

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15	US 6470055 B1	20021022	71	Spectrally efficient FQPSK, FGMSK, and FQAM for enhanced performance CDMA, TDMA, GSM, OFDN, and other systems	375/259
16	US 6449246 B1	20020910	35	Multicarrier personal access communication system	370/210
17	US 6430228 B1	20020806	14	Digital QAM modulator using post filtering carrier recombination	375/261
18	US 6313885 B1	20011106	29	DTV receiver with baseband equalization filters for QAM signal and for VSB signal which employ common elements	348/725
19	US 6259743 B1	20010710	26	Automatic constellation phase recovery in blind start-up of a dual mode CAP-QAM receiver	375/261
20	US 6141387 A	20001031	17	Digital QAM modulator using post filtering carrier recombination	375/261
21	US 6137829 A	20001024	14	System and method for transmitting special marker symbols	375/222
22	US 6104442 A	20000815	29	Radio receiver for receiving both VSB and QAM digital HDTV signals	348/725

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15	370/215; 375/219; 375/261; 375/269; 375/298; 375/308; 375/329	Feher; Kamilo
16	370/206; 370/328; 370/343; 375/260; 375/261	Barton; Melbourne et al.
17	375/277; 375/298; 375/308; 375/332	Zhang; Qin
18	348/614; 348/727; 375/229; 375/261	Patel; Chandrakant B. et al.
19	375/222; 375/342	Garth; Lee McCandless
20	375/277; 375/298; 375/308; 375/332	Zhang; Qin
21	329/304; 332/103; 370/207; 375/261; 375/264; 375/269; 375/298; 375/324; 375/340; 379/93.08	Betts; William L.
22	348/726; 375/261	Patel; Chandrakant Bhailalbai et al.

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23	US 6026120 A	20000215	26	System and method for using circular constellations with uncoded modulation	375/261
24	US 5966376 A	19991012	41	Apparatus and method for digital data transmission using orthogonal cyclic codes	370/342
25	US 5878088 A	19990302	19	Digital variable symbol timing recovery system for QAM	375/324
26	US 5859877 A	19990112	22	Simultaneous analog and digital communication using fractional rate encoding	375/298
27	US 5844944 A	19981201	24	Simultaneous analog and digital communication using partitioning of bits into words	375/298
28	US 5818653 A	19981006	30	Multiple-values digital signal magnetic recording and reproducing apparatus using a QAM and PSK modulator, pilot signal and a viterbi decoder	360/32
29	US 5809062 A	19980915	10	Ambiguity resolution system in direct sequence spread spectrum modulation systems	375/144

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23	375/219	Betts; William L.
24	370/441; 370/479; 375/261; 375/298; 375/358; 714/746; 714/795; 725/144	Rakib; Selim Shlomo et al.
25	329/304; 329/306; 375/260; 375/261; 375/326; 375/355; 375/371; 375/373	Knutson; Paul Gothard et al.
26	332/103; 375/261; 375/308	Betts; William Lewis et al.
27	375/261	Betts; William Lewis et al.
28	375/261	Park; Sam-yong et al.
29	375/145; 375/261; 375/279; 375/298; 375/325; 375/329; 375/343	Hulbert; Anthony Peter

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30	US 5805583 A	19980908	45	Process for communicating multiple channels of digital data in distributed systems using synchronous code division multiple access	370/342
31	US 5751774 A	19980512	25	Transmission system for digital audio broadcasting	375/367
32	US 5684834 A	19971104	22	Simultaneous analog and digital communication using fractional rate encoding	375/298
33	US 5608755 A	19970304	36	Method and apparatus for implementing carrierless amplitude/phase encoding in a network	375/219
34	US 5588022 A	19961224	10	Method and apparatus for AM compatible digital broadcasting	375/216
35	US 5537441 A	19960716	21	Controlled simultaneous analog and digital communication	375/261
36	US 5537436 A	19960716	30	Simultaneous analog and digital communication applications	375/222
37	US 5535245 A	19960709	22	Modulation/demodulation circuit for a digital signal recorder/reproducer	375/261

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30	370/335; 370/347; 370/441; 370/479; 375/261; 375/298; 375/358	Rakib; Selim Shlomo
31	370/509; 370/515; 370/522; 375/261; 375/298; 375/364	Wang; Jin-Der
32	375/261	Betts; William Lewis et al.
33	370/201; 375/261	Rakib; Selim
34	375/260; 375/261; 375/279; 375/298; 375/308; 375/329; 375/340	Dapper; Mark J. et al.
35	370/206; 375/222; 379/93.08	Bremer; Gordon et al.
36	375/261; 455/553.1 ; 455/557	Bottoms; Stanley et al.
37	329/304; 332/103; 360/29; 375/264; 375/324; 386/124	Kim; Soon T.

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38	US 5506636 A	19960409	33	HDTV signal receiver with imaginary-sample-presence detector for QAM/VSB mode selection	348/725
39	US 5495203 A	19960227	20	Efficient QAM equalizer/demodulator with non-integer sampling	329/306
40	US 5471508 A	19951128	41	Carrier recovery system using acquisition and tracking modes and automatic carrier-to-noise estimation	375/344
41	US 5448555 A	19950905	29	Simultaneous analog and digital communication	370/206
42	US 5440585 A	19950808	28	Applications of simultaneous analog and digital communication	375/261
43	US 5287351 A	19940215	21	Method and apparatus for minimizing error propagation in correlative digital and communication system	370/206
44	US 5222144 A	19930622	14	Digital quadrature radio receiver with two-step processing	381/15
45	US 5005186 A	19910402	44	Digital demodulator apparatus	375/328
46	US 4961206 A	19901002	31	Data modem system	375/261
47	US 4924492 A	19900508	21	Method and apparatus for wideband transmission of digital signals between, for example, a telephone central office and customer premises	379/93.08

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38	348/726; 375/261	Patel; Chandrakant B. et al.
39	329/307; 348/641; 348/727; 375/261; 375/328	Harp; Jeffrey C. et al.
40	375/261; 455/226.3	Koslov; Joshua L.
41	329/304; 332/103; 370/286; 375/222; 375/261	Bremer; Gordon et al.
42	375/222	Partridge, III; B. Waring
43	370/506; 375/261	Wall, Jr.; William E.
44	375/261; 375/320; 375/327; 375/328; 375/340	Whikehart; J. William
45	329/304; 375/261	Aono; Yoshihito et al.
46	375/328; 375/340; 375/344; 375/373	Tomlinson; Martin et al.
47	370/286; 375/223; 375/230; 375/234; 375/261; 714/792	Gitlin; Richard D. et al.

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48	US 4901333 A	19900213	18	Data transmission systems	375/345
49	US 4849703 A	19890718	16	Method and apparatus for generating a data sampling clock locked to a baud clock contained in a data signal	327/160
50	US 4808937 A	19890228	15	Phase-locked loop for a modem	327/159
51	US 4780884 A	19881025	10	Suppressed double-sideband communication system	375/261
52	US 4646326 A	19870224	9	QAM modulator circuit	375/261
53	US 4521878 A	19850604	16	Data transmitting-receiving system	370/203
54	US 4489418 A	19841218	13	Differential encoding technique	375/246
55	US 4024342 A	19770517	15	System for detecting digital data transmitted by modulating a carrier	375/235
56	US 3988539 A	19761026	17	Data transmission system using optimal eight-vector signaling scheme	375/269
57	US 3978407 A	19760831	15	Fast start-up adaptive equalizer communication system using two data transmission rates	375/231

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48	370/286; 375/222; 375/261	Hodgkiss; William
49	327/166; 327/299; 327/98; 375/222; 375/223; 375/261; 375/376; 375/377	Easley; Matthew F. et al.
50	327/160; 375/222; 375/223; 375/261; 375/376; 375/377; 379/93.28	Correa; German E. et al.
51	370/206; 375/270; 375/301	Karabinis; Peter D.
52		Backof, Jr.; Charles A. et al.
53	370/206; 375/261; 455/60	Toyonaga; Noriyasu
54	375/260; 375/261	Mazo; James E.
55	375/261; 375/269	Croisier; Alain et al.
56	375/261; 375/280; 375/284	Motley; David M. et al.
57	327/100; 333/18; 375/235; 375/261; 380/268; 455/355	Forney, Jr.; George D. et al.

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58	US 3971996 A	19760727	22	Phase tracking network	327/233

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58	375/261	Motley; David M. et al.